

CLAIMS

1. Saw comprising, in combination:

a frame, wherein the frame is mobile on a work surface and includes a main framework and a transport framework, with the transport framework being pivotably moveable relative to the main framework, with the frame being adjustable between a working position and a transport position by pivotal movement of the transport framework relative to the main framework;

an adjustment rod having a pivot end and a sliding end, with the pivot end being pivotably connected to the transport framework and the sliding end being slideably connected to the main framework, with sliding movement of the sliding end of the adjustment rod being interdependent with pivotal movement of the transport framework relative to the main framework;

a locking mechanism including an elongated member, with the elongated member having a first end and a second end, with the second end of the elongated member pivotably connected to the adjustment rod intermediate the pivot end and the sliding end of the adjustment rod, with the first end of the elongated member being slideable and lockable to the main framework, with sliding of the first end of the elongated member relative to the main framework allowing movement of the adjustment rod, with locking of the first end of the elongated member to the main framework stopping sliding movement of the adjustment rod and locking the frame into the transport position;

a shaft rotatably mounted to the frame about a central axis, with the shaft having an axial length, an access end and another end along the axial length;

a pulley mounted on the shaft for connection with a drive belt, with the frame having a hole proximate the pulley, with the drive belt passing through the hole in the frame to connect the pulley to a drive;

5 a first bearing and a second bearing mounted to the frame and supporting the shaft, with the first bearing located proximate the other end of the shaft, with the shaft free to rotate about the central axis, and with the first bearing and the second bearing cooperating to hold the shaft otherwise stationary relative to the frame;

10 a third bearing located on the access end of the shaft, with the second bearing located intermediate the third bearing and the first bearing, with the pulley located intermediate the third bearing and the second bearing;

15 a bearing support removably and replaceably mounted to the frame, with the frame having an exterior edge proximate the access end of the shaft, with the frame having a gap proximate the access end of the shaft, with the gap extending from the hole in the frame to the exterior edge of the frame and communicating the hole with the exterior edge, with the bearing support spanning the gap when mounted to the frame, with the third bearing attached to the bearing support, wherein when the bearing support is removed from the frame, the third bearing remains in position on the shaft and is void of attachments to the frame, with the gap in the frame being of a size and shape to allow the drive belt to be passed around the access end of the shaft and over the third bearing and into the hole when the bearing support is removed from the frame and while the first, second and third bearings remain in position on the shaft and the first and second bearings remain mounted on the frame, with the gap providing access to the pulley and ease of replacement of the drive belt; and

25 a saw blade mounted on the shaft, with the saw blade engaging the work surface when the frame is in the working position and with the saw blade positioned

to prevent engagement with the work surface when the frame is in the transport position, with rotation of the shaft causing rotation of the saw blade.

2. Saw comprising, in combination:

5 a frame, wherein the frame is mobile on a work surface and includes a main framework and a transport framework, with the transport framework being pivotably moveable relative to the main framework, with the frame being adjustable between a working position and a transport position by pivotal movement of the transport framework relative to the main framework;

10 an adjustment rod having a pivot end and a sliding end, with the pivot end being pivotably connected to the transport framework and the sliding end being slideably connected to the main framework, with sliding movement of the sliding end of the adjustment rod being interdependent with pivotal movement of the transport framework relative to the main framework;

15 a locking mechanism including an elongated member, with the elongated member having a first end and a second end, with the second end of the elongated member pivotably connected to the adjustment rod intermediate the pivot end and the sliding end of the adjustment rod, with the first end of the elongated member being slideable and lockable to the main framework, with sliding of the first end of the elongated member relative to the main framework allowing movement of the
20 adjustment rod, with locking of the first end of the elongated member to the main framework stopping sliding movement of the adjustment rod and locking the frame into the transport position;

a shaft rotatably mounted to the frame; and

25 a saw blade mounted on the shaft, with the saw blade engaging the work surface when the frame is in the working position and with the saw blade positioned

to prevent engagement with the work surface when the frame is in the transport position, with rotation of the shaft causing rotation of the saw blade.

3. The saw of claim 2 with an engine mechanically linked to the shaft and driving the shaft to cause rotation of the saw blade.

5 4. The saw of claim 2 further comprising, in combination: a handlebar attached to the frame to facilitate adjustment of the frame between the working position and the transport position.

5. The saw of claim 2 further comprising, in combination: an adjustment component controlling a height of the saw blade, with the height of the saw blade
10 defining a depth of cut of the saw blade when the frame is in the working position.

6. The saw of claim 2 with a second saw blade mounted on the shaft, with the second saw blade engaging the work surface when the frame is in the working position and with the second saw blade positioned to prevent engagement with the work surface when the frame is in the transport position, with rotation of the shaft
15 causing rotation of the second saw blade.

7. The saw of claim 2 with the main framework further comprising, in combination: a locking plate, with the locking plate including a slot, with the first end of the elongated member slideably passing through the slot, with the first end of the elongated member including a notch corresponding to the slot, with the first end of
20 the elongated member being locked to the main framework by the notch engaging the slot to lock the frame into the transport position.

8. The saw of claim 7 further comprising, in combination: a release lever including a contact plate and a lift arm, with the release lever pivotally mounted to the main framework about an axis intermediate the contact plate and the lift arm and
25 perpendicular to the elongated member, with the contact plate being accessible

exterior from the main framework, with the lift arm being in contact with the elongated member, with actuation of the contact plate causing the lift arm to displace the elongated member and effect disengagement of the notch of the elongated member from the slot in the locking plate, with the frame being unlocked and moveable to the working position when the elongated member is disengaged from the locking plate.

9. The saw of claim 8 further comprising, in combination: an adjustment component controlling a height of the saw blade, with the height of the saw blade defining a depth of cut of the saw blade when the frame is in the working position.

10. The saw of claim 9 further comprising, in combination:
10 a handlebar attached to the frame to facilitate adjustment of the frame between the working position and the transport position; and

an engine mechanically linked to the shaft and driving the shaft to cause rotation of the saw blade.

11. Saw comprising, in combination:
15 a frame, wherein the frame is mobile on a work surface;
a shaft rotatably mounted to the frame about a central axis, with the shaft having an axial length, an access end and another end along the axial length;
a pulley mounted on the shaft for connection with a drive belt, with the frame having a hole proximate the pulley, with the drive belt passing through the hole in the
20 frame to connect the pulley to a drive;

a first bearing and a second bearing mounted to the frame and supporting the shaft, with the first bearing located proximate the other end of the shaft, with the shaft free to rotate about the central axis, and with the first bearing and the second bearing cooperating to hold the shaft otherwise stationary relative to the frame;

a third bearing located on the access end of the shaft, with the second bearing located intermediate the third bearing and the first bearing, with the pulley located intermediate the third bearing and the second bearing;

a bearing support removably and replaceably mounted to the frame, with the
5 frame having an exterior edge proximate the access end of the shaft, with the frame having a gap proximate the access end of the shaft, with the gap extending from the hole in the frame to the exterior edge of the frame and communicating the hole with the exterior edge, with the bearing support spanning the gap when mounted to the frame, with the third bearing attached to the bearing support, wherein when the
10 bearing support is removed from the frame, the third bearing remains in position on the shaft and is void of attachments to the frame, with the gap in the frame being of a size and shape to allow the drive belt to be passed around the access end of the shaft and over the third bearing and into the hole when the bearing support is removed from the frame and while the first, second and third bearings remain in position on the shaft
15 and the first and second bearings remain mounted on the frame, with the gap providing access to the pulley and ease of replacement of the drive belt; and

a saw blade mounted on the shaft, with rotation of the shaft causing rotation of the saw blade.

12. The saw of claim 11 with the drive comprising an engine mounted on
20 the frame and linked by the drive belt to the shaft to drive the shaft causing rotation of the saw blade, with the engine being movable towards and away from the shaft to facilitate drive belt replacement and tensioning.

13. The saw of claim 11 further comprising, in combination: an adjustment component controlling a height of the saw blade, with the height of the saw blade
25 defining a depth of cut of the saw blade when the frame is in the working position.

14. The saw of claim 11 further comprising, in combination: a second saw blade mounted on the shaft, with rotation of the shaft causing rotation of the second saw blade.

15. The saw of claim 11 with the bearing support comprising, in
5 combination: an upper bar and a lower bar, with the upper bar being flat and extending across the gap and attaching to the frame in a first plane parallel to the central axis of the shaft, with the lower bar being L-shaped to undergird the upper bar while attaching to the frame in a second plane parallel to the central axis of the shaft and perpendicular to the first plane, with the upper bar and the lower bar being
10 attached to the frame by bolts.

16. The saw of claim 11 with the frame further including a main framework and a transport framework, with the transport framework being moveable relative to the main framework, with the frame being adjustable between a working position and a transport position by movement of the transport framework relative to
15 the main framework, with the saw blade engaging the work surface when the frame is in the working position and with the saw blade being positioned to prevent engagement with the work surface when the frame is in the transport position.

17. The saw of claim 16 further comprising, in combination: a handlebar attached to the frame to facilitate adjustment of the frame into the working position
20 and the transport position.

18. The saw of claim 17 further comprising, in combination:
an adjustment rod having a pivot end and a sliding end, with the pivot end being pivotably connected to the transport framework and the sliding end being slideably connected to the main framework, with sliding movement of the sliding end

of the adjustment rod being interdependent with pivotal movement of the transport framework relative to the main framework; and

5 a locking mechanism including an elongated member, with the elongated member having a first end and a second end, with the second end of the elongated member pivotably connected to the adjustment rod intermediate the pivot end and the sliding end of the adjustment rod, with the first end of the elongated member being slideable and lockable to the main framework, with sliding of the first end of the elongated member relative to the main framework allowing movement of the adjustment rod, with locking of the first end of the elongated member to the main
10 framework stopping sliding movement of the adjustment rod and locking the frame into the transport position.

19. The saw of claim 18 with the main framework having a locking plate, with the locking plate including a slot, with the first end of the elongated member slideably passing through the slot, with the first end of the elongated member
15 including a notch corresponding to the slot, with the first end of the elongated member being locked to the main framework by the notch engaging the slot to lock the frame into the transport position; and with the saw further comprising, in combination:

a release lever including a contact plate and a lift arm, with the release lever
20 pivotally mounted to the main framework about an axis intermediate the contact plate and the lift arm and perpendicular to the elongated member, with the contact plate being accessible exterior from the main framework, with the lift arm being in contact with the elongated member, with actuation of the contact plate causing the lift arm to displace the elongated member and effect disengagement of the notch of the elongated
25 member from the slot in the locking plate, with the frame being unlocked and

moveable to the working position when the elongated member is disengaged from the locking plate.

20. The saw of claim 19 with the bearing support comprising, in combination: an upper bar and a lower bar, with the upper bar being flat and
- 5 extending across the gap and attaching to the frame in a first plane parallel to the central axis of the shaft, with the lower bar being L-shaped to undergird the upper bar while attaching to the frame in a second plane parallel to the central axis of the shaft and perpendicular to the first plane, with the upper bar and the lower bar being attached to the frame by bolts.

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